

### **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in this present application.

1. **(currently amended)** ~~An Ignition~~ ignition coil for ignition systems, in particular a rod ignition coil for internal-combustion engines, comprising:

at least one primary winding (4) and at least one secondary winding (5), a high voltage being induced in the secondary winding (5) when current flows in the primary winding (4), ~~and comprising~~

a ferromagnetic core (2) which is surrounded at least in part by the primary winding (4) and the secondary winding (5), one of the windings (4, 5) additionally being surrounded at least in part by the other, ~~characterised in that~~

at least one of the windings (4, 5) comprises at least one portion (6) having a winding density that is greater than the remaining winding density, a diameter of innermost turns being smaller in the at least one portion than a diameter of the innermost turns in the remaining winding portions (9).

2. **(currently amended)** ~~The Ignition~~ ignition coil according to claim 1, ~~characterised in that~~ wherein the secondary winding (5) is so arranged relative to the primary winding (4) that each portion having elevated winding density on one winding corresponds to a portion with the remaining winding density on the other winding in the axial direction.

3. **(currently amended)** ~~The Ignition~~ ignition coil according to ~~either~~ claim 1 or claim 2, ~~characterised in that~~ wherein the primary winding (4) surrounds the secondary winding (5) and the at least one portion having elevated winding density is an initial and/or final portion (6a, 6b) of the primary winding (4) and the secondary winding (5) is arranged in the remaining winding portion (9) of the primary winding (4).

4. **(currently amended)** ~~The Ignition~~ ignition coil according to claim 3, ~~characterised in that~~ wherein the secondary winding (4) further comprises a pre-winding (5a) and/or final winding (5b) having reduced winding density, which is surrounded by the initial and/or final portion (6a, 6b) of the primary winding (4).

5. **(currently amended)** ~~The Ignition~~ ignition coil according to ~~any one of claims~~ claim 1 to 4, ~~characterised in that wherein~~ at least one of the windings ~~(4, 5)~~ is a flat wire winding.

6. **(currently amended)** ~~The Ignition~~ ignition coil according ~~any one of claims~~ claim 1 to 5, ~~characterised in that wherein~~ a soft-magnetic sleeve ~~(3)~~ surrounds the windings ~~(4, 5)~~ and the core ~~(2)~~.

7. **(currently amended)** ~~The Ignition~~ ignition coil according ~~any one of claims~~ claim 3 to 6, ~~characterised in that wherein~~ the secondary winding ~~(5)~~ is divided into a plurality of individual segments.

8. **(currently amended)** ~~The Ignition~~ ignition coil according to claim 7, ~~characterised in that wherein~~ the coil heights of the individual segments are configured to decrease in the manner of a cascade.

9. **(currently amended)** ~~The Ignition~~ ignition coil according to ~~any one of claims~~ claim 3 to 8, ~~characterised in that wherein~~ the at least one portion having elevated winding density is arranged eccentrically with respect to the center line of the ignition coil ~~(10)~~.

10. **(currently amended)** ~~The Ignition~~ ignition coil according to claim 9, ~~characterised in that wherein~~ the initial portion ~~(6a)~~ and the final portion ~~(6b)~~ of the primary coil ~~(4)~~ are arranged offset eccentrically substantially by 180° with respect to the center line of the ignition coil ~~(10)~~.

11. **(new)** An ignition coil comprising:
- a ferromagnetic core;
  - a primary winding being wound around the core;
  - a secondary winding being wound around the core, such that one of the windings at least partially surrounds the other;

at least one portion of at least one of the windings having a winding density that is greater than the remaining winding density, wherein the diameter of innermost turns is smaller in the at least one portion than the diameter of the innermost turns in the remaining winding portions.

whereby a high voltage is induced in secondary winding when current flows in the primary winding.

12. **(new)** The ignition coil according to claim 11, wherein the secondary winding is arranged relative to the primary winding such that each portion having greater winding density on one winding corresponds to a portion with the remaining winding density on the other winding in the axial direction.

13. **(new)** The ignition coil according claim 12, wherein the primary winding surrounds the secondary winding and the at least one portion having greater winding density is an initial or final portion of the primary winding and the secondary winding is arranged in the remaining winding portion of the primary winding.

14. **(new)** The ignition coil according to claim 13, wherein the secondary winding further comprises a pre-winding or final winding having reduced winding density, which is surrounded by the initial or final portion of the primary winding.

15. **(new)** The ignition coil according to claim 14, wherein at least one of the windings is a flat wire winding.

16. **(new)** The ignition coil according to claim 15, wherein a soft-magnetic sleeve surrounds the windings and the core.

17. **(new)** The ignition coil according to claim 16, wherein the secondary winding is divided into a plurality of individual segments.

18.    **(new)** The ignition coil according to claim 17, wherein coil heights of the individual segments are configured to decrease in the manner of a cascade.

19.    **(new)** The ignition coil according to claim 18 wherein the at least one portion having greater winding density is arranged eccentrically with respect to the center line of the ignition coil.

20.    **(new)** The ignition coil according to claim 19, wherein the initial portion and the final portion of the primary coil are arranged offset eccentrically substantially by 180° with respect to the center line of the ignition coil.